EPA

San Fernando Valley Superfund Sites

Region IX, San Francisco | June 1993 | Fact Sheet Number 11

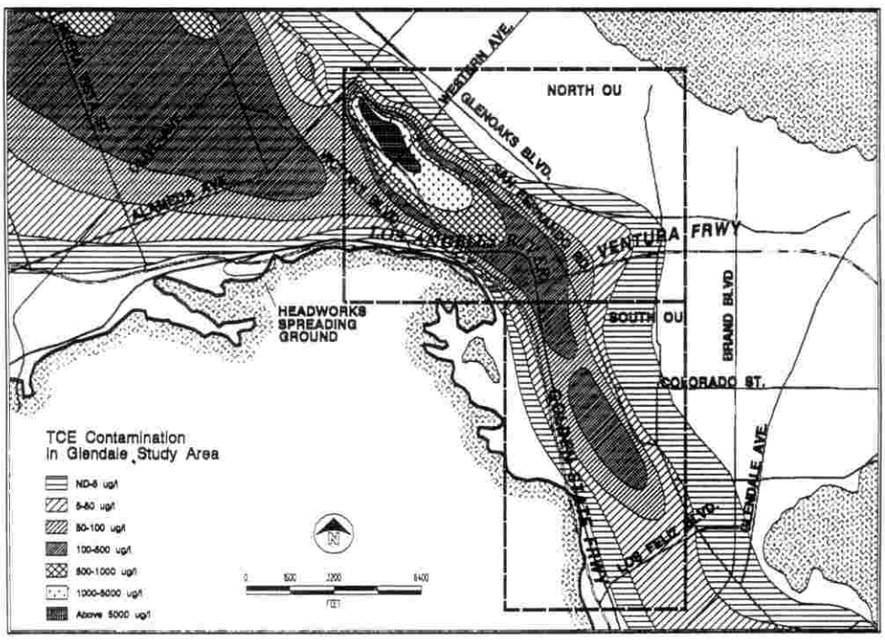
EPA SIGNS CLEANUP REMEDY FOR GLENDALE NORTH AND SOUTH OPERABLE UNITS

The U.S. Environmental Protection Agency (EPA) has selected a cleanup remedy for the North and South plumes of groundwater contamination in the Glendale Study Area portion of the San Fernando Valley Superfund site in California. On June 18, 1993, EPA Acting Regional Administrator John Wise signed two Records of Decision (RODs) that describe the methods to be used in the cleanup. The selected remedies consist of groundwater extraction and treatment for the shallow aquifer system in the Glendale area.

The selected remedy for the Glendale North and Glendale South Operable Units (OUs) is part of the overall long-term remediation of groundwater in the eastern portion of the San Fernando Valley (see **Figure 1 - Site Map**). The objectives of these discrete actions are to inhibit the migration of the contaminated portions of the aquifer and to begin to remove the contaminant mass from the shallow portion of the aquifer.

The RODs are based on information and technical analysis developed during the Remedial Investigation/Feasibility Studies (RI/FS) and consideration of community concerns and public and agency comments. The cleanup alternatives considered for the north plume portion of the Glendale Study Area were discussed in an EPA Proposed Plan fact sheet distributed in July 1992 and for the south plume, in a fact sheet distributed in September 1992. The only significant change from EPA's preferred alternative described in the Proposed Plans is that the treatment facilities for both OUs will be combined at a single location in the Glendale North OU area. The combined 5000 gallons per minute (gpm) of treated water will be supplied to the City of Glendale. The RODs can be reviewed at the information repositories listed on the back of this fact sheet.

Figure 1 — Site Map



The Selected Remedy

The selected remedy for the Glendale North and Glendale South OUs involves several components, including removal of contaminated groundwater from the shallow aquifer, treating it to remove the volatile organic contaminants (VOCs), blending the water to reduce nitrate contamination, conveyance of the treated water to the City of Glendale or another San Fernando Valley water purveyor for distribution through the public water supply system, and/or reinjection or recharge into the aquifer.

Under the selected remedy, groundwater will be extracted at a rate of 3,000 gpm for Glendale North and 2,000 gpm for Glendale South for 12 years. New extraction wells will be installed at locations that most effectively inhibit the migration of the contaminant plume. The most contaminated groundwater is located in the Upper Zone (shallow portion) of the aquifer.

The extracted groundwater will, if necessary, be filtered to remove any suspended solids and then treated for VOCs using either single- or dual-stage air stripping or liquid-phase granular activated carbon (GAC). If air stripping is chosen, then vapor-phase GAC adsorption will be used to control air emissions.

The treated water leaving the treatment plant will meet all maximum contaminant levels (MCLs) and secondary drinking water standards, except for nitrate. The treated water will be blended with water which does not contain nitrate in excess of the nitrate MCL to reduce nitrate levels and meet the MCL. The treated and blended water will then be conveyed to the City of Glendale or another municipality for distribution through the public water supply system (see **Figure 2 — Treatment Schematic**). The treated and blended water will meet all standards prior to being delivered to a public water supply system. **The water will be safe for individuals to consume and use.**

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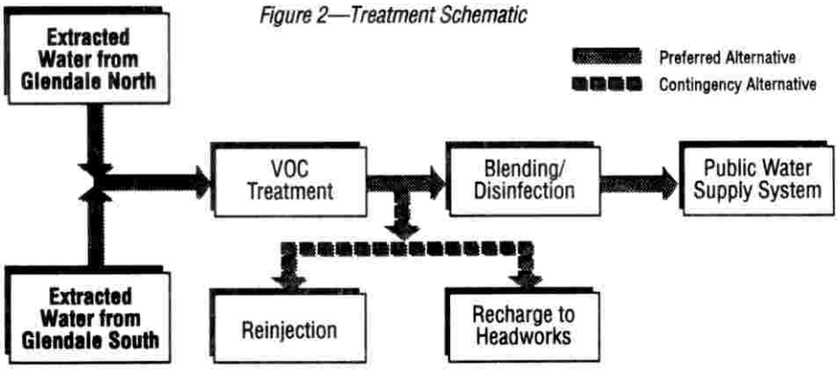
Background

In 1980, after finding organic chemical contamination in the groundwater of the San Gabriel Valley, the California Department of Health Services (DHS) requested that all major water purveyors using groundwater conduct tests for the presence of certain industrial chemicals in the water they were serving. The results of the testing revealed the presence of volatile organic compound (VOC) contamination in the groundwater beneath large areas of the San Fernando Valley. The primary contaminants of concern are the solvents trichloroethylene (TCE) and perchloroethylene (PCE), widely used in a variety of industries including machinery degreasing, metal plating, and dry cleaning.

As a result of the groundwater contamination, the majority of the City of Glendale's wells have been taken out of service. It should be noted that the City of Glendale closely monitors the quality of drinking water delivered to residents; the water meets all Federal and State drinking water requirements. Currently, nearly all of the water delivered by the City of Glendale is purchased from the Metropolitan Water District of Southern California.

EPA has signed RODs for two other OUs in the San Fernando Valley: North Hollywood OU (1987) and Burbank OU (1989). The North Hollywood OU Interim Remedy is currently operating and the Burbank OU is in the remedial design phase. All remedial actions established by EPA in the RODs or Proposed Plans issued to date are interim measures but are intended to be consistent with the overall long-term remediation of the San Fernando Valley.

Figure 2—Treatment Schematic



As a result of comments by the City of Glendale on the Glendale North Operable Unit (OU) Proposed Plan (July 1992) and the Glendale South OU Proposed Plan (September 1992) indicating that the City had sufficient water credits to accept the treated water from both OUs and in order to decrease overall costs associated with the OUs, EPA has determined that the treatment plants for the Glendale North and Glendale South OUs will be combined. A total of 5,000 gpm of treated water will be conveyed to the City of Glendale for distribution to its public water supply system. The exact configuration of the combined treatment plant will be determined during the remedial design phase of the project. Figure 2 shows the planned treatment operation.

However, if the City of Glendale does not agree to accept the treated water from both OUs, possibly due to water supply needs, or if EPA determines that combining the treatment plants will significantly delay or hinder the implementation of the Glendale North or South OUs, the treatment plants will not be combined and only the treated water from the Glendale North OU will be conveyed to the City of Glendale. The Glendale South treated water would be offered to another water purveyor. As a further contingency, if the City of Glendale does not accept any or all of the treated water, any remaining portion of the water will be either offered to another San Fernando Valley water purveyor, reinjected into the aquifer (per the Glendale North ROD) or recharged at the Headworks Spreading Grounds (per the Glendale South ROD).

Estimated costs for the Glendale North and South OUs are $36.4 million and $25 million, respectively. The combined treatment system is estimated to save up to $13.8 million (total present worth) over the costs associated with two separate treatment plants.

Groundwater monitoring wells will be installed to evaluate the effectiveness of the selected remedies. Groundwater monitoring will be conducted quarterly to evaluate water quality, determine and evaluate how much of the contaminant plume each extraction well captures, evaluate the migration of contaminants, and monitor any other factors associated with the effectiveness of the selected remedies. Monitoring may be decreased to less than quarterly if the results from the evaluations warrant such a change.

Next Steps

EPA will now begin negotiations with potentially responsible parties (PRPs) to implement the selected remedy. The enforcement document between EPA and the PRPs may be an Administrative Order or a Consent Decree.

EPA anticipates that the treatment system should be operational by 1996.

For More Information

If you need more information, please contact:

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Information Repositories

EPA maintains information repositories containing fact sheets, technical documents, the Remedial Investigation/Feasibility Study, the Community Relations Plan, the ROD, and other reference materials. The Administrative Records for both Glendale North and Glendale South OUs (files containing all documents relating to EPA's selection of a cleanup plan for the site), are available for review at the information repositories.

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Contact: Andrea Anzalone

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Contact: Lois Brown

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Los Angeles, CA 90012
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Contact: Joyce Purcell

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INSIDE: Cleanup Remedy Selected for Glendale North and South Operable Units